

In the Claims

1. (Canceled) ✓

2. (Canceled) ✓

3. (Canceled) ✓

4. (Canceled) ✓

5. (Canceled) ✓

6. (Canceled) ✓

7. (Canceled) ✓

8. (Canceled) ✓

9. (Canceled) ✓

10. (Canceled) ✓

11. (Canceled) ✓

12. (Canceled) ✓

¹/~~13.~~ (Previously Presented) ~~A system operating on at least one computer for allowing allocation of products among sellers, comprising:~~

a hierarchy of at least two seller models, each representing a seller for a product having an associated product forecast model, the forecast model representing:

forecasted sales of the product through each seller according to a commitment level for the seller and forecasted sales through other sellers in the hierarchy;

planned supply of the product;

customer orders for the product through each seller; and

allocated supply of the product to each seller, representing the sum of promises from suppliers plus any customer promises;

at least one supplier model operable to indicate to the seller models, according to the forecasted sales, promised supply of the product;

¹/~~14.~~ at least one customer model operable to indicate to the seller models customer orders for the product; and

wherein the system is operable to indicate to each seller in the hierarchy the allocated supply of the product to the seller.

²/~~14.~~ (Previously Presented) The system of Claim ¹/~~13~~, wherein at least a portion of the allocated supply is designated as retained product not available to promise (ATP).

³/~~15.~~ (Previously Presented) The system of Claim ¹/~~13~~, wherein the amount of product available to promise (ATP) at a seller for a forecast entry is determined according to an allocation policy.

¹/~~16.~~ (Previously Presented) The system of Claim ³/~~15~~, wherein the amount may be reduced to zero according to the allocation policy.

~~5~~
~~17.~~ (Previously Presented) The system of Claim ~~18~~, wherein the allocation policy is selected from the group consisting of:

- a first-come-first-served policy;
- a per allocated policy;
- a per committed policy;
- a seller priority policy; and
- a predetermined split policy.

~~6~~
~~18.~~ (Previously Presented) The system of Claim ~~19~~, wherein the system is further operable to distribute the allocated supply according to an allocation policy.

~~7~~
~~19.~~ (Previously Presented) The system of Claim ~~20~~, wherein at least some of the allocated supply is distributed on a basis selected from the group consisting of:

- a1
- a first-come-first-served basis;
 - a per allocated basis;
 - a per committed basis;
 - a seller priority basis; and
 - a predetermined split basis.

~~8~~
~~20.~~ (Previously Presented) The system of Claim ~~21~~, further comprising:
at least one specific product model representing a specific product and specifying the components of the specific product;

a plurality of generic product models each representing a generic product and specifying one component of a plurality of possible components of the specific product; and

wherein the system is further operable to provide a customer promise for the specific product according to the related generic products that are available to promise.

~~9~~
~~21.~~ (Previously Presented) The system of Claim ~~22~~, wherein generic-specific product relationships repeat throughout the seller hierarchy, there also being organization-member relationships between generic and specific products.

~~20~~ 22. (Previously Presented) The system of Claim ~~18~~¹⁵, wherein the forecast model has:

an associated forecast period; and

~~b~~ an associated available to promise (ATP) period that ~~is~~^{is} shorter than the forecast period.

~~22~~ 23. (Previously Presented) The system of Claim ~~18~~¹⁵, wherein the forecast model is operable to reduce the forecasted sales and promised supply according to the customer orders without changing the allocated supply.

~~24~~ 24. (Currently Amended) Software for allowing allocation of products among sellers, the software being embodied in a computer readable medium and when executed on a computer system operable to:

a\ access a hierarchy of at least two seller models, each representing a seller for a product having an associated product forecast model, the forecast model representing:

forecasted sales of the product through each seller according to a commitment level for the seller and forecasted sales through other sellers in the hierarchy;

planned supply of the product;

customer orders for the product through each seller; and

allocated supply of the product to each seller, representing the sum of promises from suppliers plus any customer promises;

access at least one supplier model operable to indicate to the seller models, according to the forecasted sales, promised supply of the product;

access at least one customer model operable to indicate to the seller models customer orders for the product; and

~~wherein the system is operable to indicate to each seller in the hierarchy the allocated supply of the product to the seller.~~

~~23~~ 25. (Currently Amended) A computer-implemented method operating on at least one computer system for allowing allocation of products among sellers, the computer system comprising one or more processing units and one or more memory units, the method comprising:

using the computer system, representing at least two sellers in a hierarchy using corresponding seller models, each seller model representing a seller for a product having an associated product forecast model, the forecast model representing:

forecasted sales of the product through each seller according to a commitment level for the seller and forecasted sales through other sellers in the hierarchy;

planned supply of the product;

customer orders for the product through each seller; and

allocated supply of the product to each seller, representing the sum of promises from suppliers plus any customer promises;

using the computer system, indicating to the seller models, according to the forecasted sales and using at least one supplier model, promised supply of the product;

using the computer system, indicating to the seller models, using at least one customer model, customer orders for the product; and

using the computer system, indicating to each seller in the hierarchy the allocated supply of the product to the seller.

~~24~~ 26. (Currently Amended) The method of Claim ~~23~~ 25, further comprising, using the computer system, designating at least a portion of the allocated supply as retained product not available to promise (ATP).

~~25~~ 27. (Currently Amended) The method of Claim ~~23~~ 25, further comprising, using the computer system, determining the amount of product available to promise (ATP) at a seller for a forecast entry according to an allocation policy.

~~26~~ 28. (Previously Presented) The method of Claim ~~25~~ 27, wherein the amount may be reduced to zero according to the allocation policy.

~~27~~²⁷ ~~29~~ (Previously Presented) The method of Claim ~~27~~²⁵, wherein the allocation policy is selected from the group consisting of:

- a first-come-first-served policy;
- a per allocated policy;
- a per committed policy;
- a seller priority policy; and
- a predetermined split policy.

~~28~~²⁸ ~~30~~ (Currently Amended) The method of Claim ~~28~~²³, further comprising, using the computer system, distributing the allocated supply according to an allocation policy.

~~29~~²⁹ ~~31~~ (Currently Amended) The method of Claim ~~29~~²³, further comprising, using the computer system, distributing at least some of the allocated supply on a basis selected from the group consisting of:

- a first-come-first-served basis;
- a per allocated basis;
- a per committed basis;
- a seller priority basis; and
- a predetermined split basis.

~~30~~³⁰ ~~32~~ (Currently Amended) The method of Claim ~~30~~²³, further comprising, using the computer system:

using at least one specific product model to represent a specific product, the specific product model specifying the components of the specific product;

using a plurality of generic product models to represent a plurality of corresponding generic products, the generic product models each specifying one component of a plurality of possible components of the specific product; and

providing a customer promise for the specific product according to the related generic products that are available to promise.

³¹
~~31~~. (Previously Presented) The method of Claim ³⁰
~~32~~, wherein generic-specific product relationships repeat throughout the seller hierarchy, there also being organization-member relationships between generic and specific products.

³²
~~34~~. (Previously Presented) The method of Claim ²³
~~25~~, wherein the forecast model has:

an associated forecast period; and

¹⁵
~~16~~ an associated available to promise (ATP) period that ¹³
~~14~~ is shorter than the forecast period.

³³
~~35~~. (Currently Amended) The method of Claim ²³
~~25~~, further comprising, using the computer system, reducing the forecasted sales and promised supply within the forecast model, according to the customer orders, without changing the allocated supply.

¹³
~~36~~. (New) The software of Claim ¹²
~~24~~, wherein at least a portion of the allocated supply is designated as retained product not available to promise (ATP).

¹⁷
~~37~~. (New) The software of Claim ¹²
~~24~~, wherein the amount of product available to promise (ATP) at a seller for a forecast entry is determined according to an allocation policy.

¹⁵
~~38~~. (New) The software of Claim ¹²
~~24~~, wherein the amount may be reduced to zero according to the allocation policy.

¹⁶
~~39~~. (New) The software of Claim ¹²
~~24~~, wherein the allocation policy is selected from the group consisting of:

- a first-come-first-served policy;
- a per allocated policy;
- a per committed policy;
- a seller priority policy; and
- a predetermined split policy.

⁹
~~17~~ 40. (New) The software of Claim ~~24~~¹², further operable to distribute the allocated supply according to an allocation policy.

~~18~~ 41. (New) The software of Claim ~~24~~¹², wherein at least some of the allocated supply is distributed on a basis selected from the group consisting of:

- a first-come-first-served basis;
- a per allocated basis;
- a per committed basis;
- a seller priority basis; and
- a predetermined split basis.

~~19~~ 42. (New) The software of Claim ~~24~~¹², further operable to:
access at least one specific product model representing a specific product and specifying the components of the specific product;

access a plurality of generic product models each representing a generic product and specifying one component of a plurality of possible components of the specific product; and

provide a customer promise for the specific product according to the related generic products that are available to promise.

~~20~~ 43. (New) The software of Claim ~~42~~¹², wherein generic-specific product relationships repeat throughout the seller hierarchy, there also being organization-member relationships between generic and specific products.

~~21~~ 44. (New) The software of Claim ~~24~~¹², wherein the forecast model has:
an associated forecast period; and
an associated available to promise (ATP) period that is shorter than the forecast period.

~~22~~ 45. (New) The software of Claim ~~24~~¹², wherein the forecast model is operable to reduce the forecasted sales and promised supply according to the customer orders without changing the allocated supply.